



STATE OF UTAH  
NATURAL RESOURCES & ENERGY  
Oil, Gas & Mining

4241 State Office Building • Salt Lake City, UT 84114 • 801-533-5771

Scott M. Matheson, Governor  
Temple A. Reynolds, Executive Director  
Cleon B. Feight, Division Director

August 17, 1982

Mr. Dennis L. Judd  
Nielsen & Senior  
Basin State Bank Bldg.  
363 East Main  
Vernal, Utah 84078

RE: Permitting Zeigler  
Chemical & Mineral Corp.  
Cowboy, #1 Mine  
ACT/047/019  
Uintah County, Utah

Dear Mr. Judd:

The Division of Oil, Gas, and Mining has made a preliminary review of the Cowboy #1 Mine Plan to determine compliance with Rule M-3 of the Utah Mined Land Reclamation Act of 1975, Title 40-8, Utah Code Annotated 1953. This review was based on information submitted in MR Forms 1, 2, and 8, and the attached mine plan.

In this review, certain necessary information was found to be lacking. The additional information that is needed to complete our review is detailed on the following pages. This information should be submitted as part of, or in conjunction with, the revised MR-1 Form (which replaces MR Forms 1, 2, and 8) that is enclosed. When the additional information and forms have been received, the total plan can be assessed for compliance with the regulations.

If you have any questions, or would like to set up a meeting with members of the review team, please contact me or Cy Young of my staff.

Sincerely,

JAMES W. SMITH, JR.  
COORDINATOR OF MINED  
LAND DEVELOPMENT

Encl: a/s

JWS/CY:mn

cc: Jackson Moffitt, MMS



Rule M-3(1)(a)-(d)

The applicant should submit a topographic map showing the area to be disturbed by mining, the location of existing shafts and facilities and the location of the proposed shafts and facilities. The map should also show any transmission lines or phone lines within 500 feet of the property boundary. This map should be of a 1 inch = 200 feet to 1 inch = 400 feet scale so that areas of proposed disturbances can be adequately reviewed.

Rule M-3(1)(f)

Show the general location of test borings or core holes and the depth of water bearing strata. Include depth and thickness of plant support material if available.

Rule M-3(1)(g)

Show the location for storage of topsoil and/or soil material and proposed areas for disposal of waste rock and overburden.

Rule M-3(1)(h)

The preliminary inspection trip showed quantities of water at about 70-100 depth in an open borehole near the proposed number two shaft. It was indicated that this water or any water encountered would be pumped into nearby stream drainages. Describe the water to be disposed of, giving in general terms the acid or salt content and the expected down-stream impact. The plan should include a copy of the NPDES permit to discharge water.

Rule M-3(2)(b)

The plan should include a statement of possible uses for the land following reclamation.

Rule M-3(2)(c)

Applicant should describe the removal and stockpiling of plant supporting materials. Depth of available material should be indicated, as well as depth which will be reapplied to the area after mining. The volume of this material stored at any one time, as well as the length that it will be stockpiled should be indicated. Measures to stabilize such material from wind and water erosion (i.e., with berms, vegetation cover, or mulch) should be proposed.

Rule M-3(2)(e)

Discuss the program proposed for revegetation, including types of vegetation to be used and time of proposed planting.



Rule M-3(2)(f)

Provide a timetable for proposed reclamation identifying all major steps in the plan (i.e., removal of hoist house and head frames, regrading, capping of shafts, etc).

Rule M-3(3)

Pre and post-mining profile cross-sections through the mined area should be provided. The location of the cross-sections should be shown on the topographic mine map.

Information on the gilsonite vein, such as thickness over the permit area, offsets at depth, and mining sequence by year for life of the mine should be submitted.

Cross-sectional profiles of the access road, general road grade, and sizing calculations for any culverts or diversions, if applicable, should be submitted.

Rule M-5

Applicant should submit an estimate of reclamation surety bond on the basis of the total amount of disturbance that will need to be finally reclaimed. Enclosed is a copy of the standard bonding form the Division uses. Bond estimate should take into account all items on the form, as well as any other reclamation measures necessary. Evidence of the bond should be included with the mine plan.

Rule M-10(2)

Applicant should post a trucks entering highway warning sign on State Highway 45 near the access road entrance.

Rule M-10(7)

Applicant should discuss reclamation of the access road and any pad areas as far as ripping, regrading, and preparation for final revegetation.

Rule M-10(12)

A complete revegetation plan, including seedbed preparation methods, time of year of seeding, seeding methods, an appropriate revegetation species list (given in pounds of pure live seed per acre), and use of mulching (kind and amount per acre), fertilization, and irrigation should be submitted. Methods and a timetable for monitoring revegetated areas should be discussed, along with procedures to determine success of revegetation (i.e., statistical tests to compare revegetated areas with the established success standard).

Rule M-10(14)

Results from soils tests should be included with the plan. Tests should include pH, electrical conductivity (in mmhos/cm), sodium absorption ratio (SAR), and concentrations (in ppm) of sodium, magnesium, calcium, phosphorus, and available nitrogen. If there is more than one soil type on the area that will be mined, samples should be taken from each type and a map submitted delineating the areas covered by each type and showing where the samples were taken.

In addition to addressing the above points, the Applicant should submit a copy of the BLM approval (including stipulations), and any other approvals from State or Federal agencies.